

Linda Snyder
Ken-Koat, Inc.
PO Box 1027
Huntington, Indiana 46750

Re: SSM 069-12898-00018
Significant Source Modification to:
Part 70 Operating Permit No.: **T 069-7676-00018**

Dear Ms. Snyder:

Ken-Koat, Inc. was issued Part 70 operating permit T 069-7676 on July 9, 1999 for a metal coating operation. A first Administrative Amendment (069-13557-00018) was issued on December 13, 2000. An application to modify the source was received on October 25, 2000. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- (a) One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:
 - (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;
 - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and
 - (3) One (1) electric heater.

Increasing the capacity at the one (1) dip conveyor designated as DC-2 is approved for construction as follows:

- (b) One (1) dip conveyor designated as DC-2, with emissions controlled by a thermal oxidizer, CE-3, with the following equipment:
 - (1) One (1) coating tank with a maximum topcoat application rate of ~~11.73~~ **12.00** pounds per hour, which exhausts to a stack designated as C3.
 - (2) One (1) primer tank with a maximum primer application rate of ~~5.32~~ **8.20** pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million British thermal units per hour, which exhausts to one (1) stack designated as C3.

The source never installed the one (1) dip and spin, identified as DS-2, the one (1) dip conveyor, identified as DC-3, and the one (1) dip conveyor, identified as DC-4, which will be removed from the permit. One (1) HVLP chain on edge machines, designated as COE-2, has been removed from this source and will be removed from the permit.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The proposed operating conditions applicable to these emission units are attached to this Source Modification approval. These proposed operating conditions shall be incorporated into the Part 70 operating permit as an Administrative Amendment (069-12991-00018) in accordance with 326 IAC 2-7-10.5(l)(1) and 326 IAC 2-7-11.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter contact CarrieAnn Ortolani, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395). As of January 1, 2001, the name of the Office of Air Management has been changed to the Office of Air Quality.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
CAO/MES

cc: File - Huntington County
U.S. EPA, Region V
Huntington County Health Department
Air Compliance Section Inspector - Ryan Hillman
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY*

**Ken-Koat, Inc.
1605 Riverfork Drive East
Huntington, Indiana 46750**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 069-7676-00018	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: July 9, 1999

First Administrative Amendment 069-13557-00018, issued on December 13, 2000

First Significant Source Modification No.: 069-12898-00018	Pages affected: 3, 5, 6, 7, 8, 33, 34 and 35, 37, 38, 39, 40, 50, 51 and 52; 52a, 52b, 52c and 52d are added
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality*	Issuance Date: May 9, 2001

*As of January 1, 2001, the name of the Office of Air Management (OAM) has been changed to the Office of Air Quality (OAQ). All references to Office of Air Management (OAM) should be read as Office of Air Quality (OAQ).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.10 Compliance Schedule [326 IAC 2-7-6(3)]
- C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.13 Monitoring Methods [326 IAC 3]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
- C.19 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)]
- C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

Stratospheric Ozone Protection

- C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS: - "New Equipment": DC-2 and CE-3

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.1.2 New Source Toxics Control [326 IAC 2-1.3-4]
- D.1.3 PSD Modification [326 IAC 2-2][40 CFR 52.21]
- D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.1.6 Volatile Organic Compounds (VOC)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.1.7 Recuperative Thermal Oxidizer Operations

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.8 Record Keeping Requirements
- D.1.9 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS: "Existing Equipment": DC-1, DS-1, RCP, Four (4) HVLP spray booths, SB-1 - SB-4, Three (3) Chain on edge machines, COE-1, COE-3 & COE-4

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.2.2 PSD Minor Limit [326 IAC 2-2][40 CFR 52.21]
- D.2.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.5.3 Volatile Organic Compound (VOC) [326 IAC 8-2-9]
- D.5.4 New Source Toxics Control [326 IAC 2-1-3.4]
- D.5.5 PSD Modification [326 IAC 2-2] [40 CFR 52.21]
- D.5.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.5.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.5.8 Volatile Organic Compounds

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.5.9 Recuperative Thermal Oxidizer Operations

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.5.10 Record Keeping Requirements
- D.5.11 Reporting Requirements

D.6 FACILITY OPERATION CONDITIONS: One (1) chain on edge machine (COE-6)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]
- D.6.2 New Source Toxics Control [326 IAC 2-1.3-4]
- D.6.3 Particulate Matter (PM) [326 IAC 6-3-2]
- D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
- D.6.6 Volatile Organic Compounds (VOC)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.6.7 Recuperative Thermal Oxidizer Operations

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.6.8 Record Keeping Requirements

Certification

Emergency/Deviation Occurrence Report

Quarterly Report, DS-1

Quarterly Report, COE-1

Quarterly Report, COE-2 (no longer needed)

Quarterly Report, SB-1

Quarterly Report, SB-2

Quarterly Report, SB-3

Quarterly Report, SB-4

Quarterly Report, "Existing Equipment"

Quarterly Compliance Monitoring Report

Semi-Annual Compliance Monitoring Report (for DG)

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates stationary metal coating operation.

Responsible Official:	Chris Robertson
Source Address:	1605 Riverfork Drive, Huntington, Indiana 46750
Mailing Address:	PO Box 1027, Huntington, Indiana 46750
SIC Code:	3479
County Location:	Huntington
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) dip and spin for metal inserts, designated as DS-1, with a maximum adhesive application rate of 5.68 pounds per hour, which exhausts to one (1) stack designated as S-18.
- (b) One (1) dip conveyor designated as DC-1, with a maximum application rate of 34.93 pounds per hour, which utilizes one (1) dryer, and is controlled by thermal oxidizer, CE-3, which exhausts to one (1) stack designated as C3.
- (c) One (1) dip conveyor designated as DC-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
 - (1) One (1) coating tank with a maximum topcoat application rate of 12.00 pounds per hour, which exhausts to a stack designated as C3.
 - (2) One (1) primer tank with a maximum primer application rate of 8.20 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3..
- (d) One (1) ransburg coating process, designated as RCP, controlled by the thermal oxidizer, CE-3, with a maximum metal insert rate of 1000 pounds per hour with the following equipment:
 - (1) Two (2) electrostatic paint booths, designated as EPB-1 and EPB-2 respectively, each with a maximum application rate of 11.42 pounds per hour, each exhausting to the thermal oxidizer (CE-3) and stack C3.

- (2) One (1) natural gas fired oven, designated as OVEN-3, which exhausts to one (1) stack, designated as C4.
- (e) Four (4) HVLP spray booths for painting metal inserts, designated as SB-1, SB-2, SB-3 and SB-4, with a maximum adhesive application rate of 5.94 pounds per hour, 11.91 pounds per hour, 4.92 pounds per hour and 4.38 pounds per hour, respectively. All are equipped with dry filters for particulate matter control. SB-1 exhausts to one (1) stack designated as S-10, SB-2 exhausts to one (1) stack designated as S-11, SB-3 exhausts to one (1) stack designated as S-1, and SB-4 exhausts to one (1) stack designated as S-2.
- (f) One (1) open top degreaser, identified as DG, with a maximum trichloroethylene consumption rate of 12 gallons per day which exhausts internally.
- (g) Three (3) steel grit blasters, designated as SGB-1, SGB-2, and SGB-3, each with a maximum metal insert throughput of 1200 pounds per hour, controlled by a baghouse designated as CE-1, exhausting to one (1) stack designated as #C1.
- (h) One (1) aluminum oxide grit blaster, identified as ALOX-1, with a maximum metal insert throughput of 1200 pounds per hour, controlled by a baghouse designated as CE-2 and exhausting to a stack designated as #C2.
- (i) Three (3) HVLP chain on edge machines, designated as COE-1, COE-3 and COE-4, with a maximum adhesive application rate of 9.38 pounds per hour, 21.51 pounds per hour and 16.08 pounds per hour, respectively. Each chain on edge machine is equipped with dry filters for particulate matter control. COE-1 exhausts to two (2) stacks designated as S-12 and S-13. COE-3 and COE-4 exhaust to the thermal oxidizer, CE-3, to control VOC emissions, and stack C3.
- (j) One (1) HVLP chain on edge machine, designated as COE-5, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
 - (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) electric heater which exhausts to one (1) stack designated as C3.
- (k) One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:
 - (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;
 - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and
 - (3) One (1) electric heater.

5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
 - (1) One (1) natural gas boiler with a maximum heat input capacity of 5.23 million Btu per hour.
 - (2) One (1) burn-off oven, designated as BURN, maximum heat input capacity of 1 million Btu per hour, ventilated to an afterburner with 90% control efficiency, which exhausts to one (1) stack designated as C4.
 - (3) One (1) natural gas fired thermal oxidizer designated as CE-3, with a maximum heat input capacity of 6.00 million Btu per hour, with a minimum oxidizing zone temperature of 1400F.
- (b) Infrared cure equipment.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (c) One (1) dip conveyor designated as DC-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
 - (1) One (1) coating tank with a maximum topcoat application rate of 12.00 pounds per hour, which exhausts to a stack designated as C3.
 - (2) One (1) primer tank with a maximum primer application rate of 8.20 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.
- (a)(3) One (1) natural gas fired thermal oxidizer designated as CE-3, with a maximum heat input capacity of 6.00 million Btu per hour, with a minimum oxidizing zone temperature of 1400F.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain an overall VOC control efficiency of 92.2% for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating in pounds per gallon of solids delivered to DC-2, the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) and COE-5 listed in Section D.5 shall be limited to 85.5. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

D.1.2 New Source Toxics Control [326 IAC 2-1-3.4]

The allowable HAP emissions shall be based on the Maximum Achievable Control Technology (MACT) analysis determined by the Office of Air Quality. The MACT for DC-2, shall be the use of the thermal oxidizer, CE-3, as described in Condition D.1.1(b), in combination with the application method of dip coating. The overall efficiency of this control device shall be 92.2%.

D.1.3 PSD Modification [326 IAC 2-2] [40 CFR 52.21]

Any change or modification which may increase the VOC PTE of DC-2, CE-3 and COE-5 (listed in Section D.5) to greater than 249 tons per year, shall require prior approval from the Office of Air Quality before such change may occur.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for DC-2 and any control devices (CE-3).

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.7 Recuperative Thermal Oxidizer Operations

- (a) When operating the thermal oxidizer to achieve the limit established under 326 IAC 8-2-9, 3.5 pounds of VOC per gallon of coating less water, the thermal oxidizer shall maintain a minimum operating temperature of 1400° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a minimum overall VOC control efficiency of 92.2%. The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Conditions D.1.1 and D.1.2, when DC-2 is in operation.
- (b) The owner or operator shall install, calibrate, operate and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with the limit in Condition D.1.2.
 - (1) This device shall have an accuracy of $\pm 2.0^{\circ}\text{C}$ or ± 0.75 percent of the temperature range measured in degrees Celsius, whichever is greater.
- (c) Any change or modification which may increase the VOC actual emissions to 250 tons per year or more shall require prior approval from OAQ before such change may occur.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage limits and the VOC and HAPs emission limits established in Conditions D.1.1 and D.1.2.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (b) One (1) dip conveyor designated as DC-1, with a maximum application rate of 34.93 pounds per hour, which utilizes one (1) dryer, and is controlled by thermal oxidizer, CE-3, which exhausts to one (1) stack designated as C3.
- (c) One (1) dip and spin for metal inserts, designated as DS-1, with a maximum adhesive application rate of 5.68 pounds per hour, which exhausts to one (1) stack designated as S-18.
- (d) One (1) ransburg coating process, designated as RCP, controlled by the thermal oxidizer, CE-3, with a maximum metal insert rate of 1000 pounds per hour with the following equipment:
 - (1) Two (2) electrostatic paint booths, designated as EPB-1 and EPB-2 respectively, each with a maximum application rate of 11.42 pounds per hour, each exhausting to the thermal oxidizer (CE-3) and stack C3.
 - (2) One (1) natural gas fired oven, designated as OVEN-3, which exhausts to one (1) stack, designated as C4.
- (e) Four (4) HVLP spray booths for painting metal inserts, designated as SB-1, SB-2, SB-3 and SB-4, with a maximum adhesive application rate of 5.94 pounds per hour, 11.91 pounds per hour, 4.92 pounds per hour and 4.38 pounds per hour, respectively. All are equipped with dry filters for particulate matter control. SB-1 exhausts to one (1) stack designated as S-10, SB-2 exhausts to one (1) stack designated as S-11, SB-3 exhausts to one (1) stack designated as S-1, and SB-4 exhausts to one (1) stack designated as S-2.
- (i) Three (3) HVLP chain on edge machines, designated as COE-1, COE-3 and COE-4, with a maximum adhesive application rate of 9.38 pounds per hour, 21.51 pounds per hour and 16.08 pounds per hour, respectively. Each chain on edge machine is equipped with dry filters for particulate matter control. COE-1 exhausts to two (2) stacks designated as S-12 and S-13. COE-3 and COE-4 exhaust to the thermal oxidizer, CE-3, to control VOC emissions, and stack C3.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain a minimum overall VOC control efficiency of 92.2% for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2).

Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating in pounds per gallon of solids delivered to any of the facilities listed above in Section D.2 (DC-1, RCP, COE-3 and COE-4) and the facilities listed in Section D.1 (DC-2) and COE-5 listed in Section D.5 shall be limited to 85.5. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (d) The input of VOC to DC-1, RCP, COE-3, and COE-4 and the usage of cleanup solvent for DC-1, RCP, COE-3, and COE-4 (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent) shall be limited to 2564 tons used per twelve (12) consecutive months period. This limitation will prevent the VOC emissions from DC-1, RCP, COE-3, and COE-4 from being greater than 200 tons per twelve (12) consecutive month period. This limitation is based upon the use of a control device with an overall control efficiency of 92.2%.
- (e) The input of VOC including cleanup solvent, minus the VOC solvent shipped out delivered to the applicators of SB-1, SB-2, SB-3 and SB-4 shall each be limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-2-9 will not apply.
- (f) The input VOC of COE-1, ~~COE-2~~ and DS-1 shall each be limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-2-9 will not apply.

D.2.2 PSD Modification [326 IAC 2-2] [40 CFR 52.21]

The VOC input of the above listed facilities in Section D.2 (DC-1, DS-1, RCP, SB-1 - SB-4 and COE-1, COE-3 and COE-4), and Section D.4 (DG) shall be limited to less than 250 tons per twelve (12) consecutive month period. This production limitation is equivalent to a VOC potential to emit of less than 250 tons per twelve (12) consecutive month period, therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

D.2.3 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the four (4) HVLP spray booths, the three (3) chain on edge machines and the ransburg coating process shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for DC-1, SB-1 - SB-4, RCP, COE-3 and COE-4 and any control devices.

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.2.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.2.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.2.7 VOC Emissions

Compliance with Conditions D.2.1 and D.2.2 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

D.2.8 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the four (4) HVLP spray booths (SB-1 - SB-4), the three (3) chain on edge machines (COE-1, COE-3 and COE-4) and the ransburg coating process (RCP) are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.9 Recuperative Thermal Oxidizer Operations

- (a) When operating the thermal oxidizer to achieve the limit established under 326 IAC 8-2-9, 3.5 pounds of VOC per gallon of coating less water, the thermal oxidizer shall maintain a minimum operating temperature of 1400° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a minimum overall VOC control efficiency of 92.2%. The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Condition D.2.1, when DC-1, RCP, COE-3 and COE-4 are in operation.
- (b) The owner or operator shall install, calibrate, operate and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with the limit in Condition D.1.2.
 - (1) This device shall have an accuracy of $\pm 2.5^{\circ}\text{C}$ or ± 0.75 percent of the temperature range measured in degrees Celsius, whichever is greater.
- (c) Any change or modification which may increase the VOC actual emissions to 250 tons per year or more shall require prior approval from OAM before such change may occur.

D.2.10 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (S-1, S-2, S-6, S-10, S-11, S-12, S-13, and C3) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.11 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage limits and the VOC and HAPs emission limits established in Condition D.2.1.
 - (1) The amount of VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The daily volume weighted VOC content of the coatings as applied on days when a coating with a VOC content greater than 85.5 pounds of VOC per gallon of solids is used;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each month;
 - (6) The total HAPs usage for each month; and
 - (7) Monthly emissions in pounds of VOC and HAPs.
- (b) Continuous or intermittent readings of the minimum operating temperature shall be maintained to document compliance with Condition D.1.9.

SECTION D.5

FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (j) One (1) HVLP chain on edge machine, designated as COE-5, with VOC emissions controlled by thermal oxidizer, CE-3, with the following equipment:
 - (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) electric heater which exhausts to one (1) stack designated as C3.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 326 IAC 2-7-10.5, WITH CONDITIONS LISTED BELOW.

Construction Conditions

General Construction Conditions

- D.5.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

- D.5.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.3 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain a minimum overall VOC control efficiency of 92.2% for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating in pounds per gallon of solids delivered to the facilities listed above in Section D.5 (COE-5), the following facilities listed in Section D.1 (DC-2), and the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) shall be limited to 85.5. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

D.5.4 New Source Toxics Control [326 IAC 2-1-3.4]

The allowable HAP emissions shall be based on the Maximum Achievable Control Technology (MACT) analysis determined by the Office of Air Quality. The MACT for the facilities listed above in section D.5, shall be the use of the thermal oxidizer, CE-3, as described in Condition D.1.1(b), in combination with the use of HVLP application. The overall efficiency of this control device shall be 92.2%.

D.5.5 PSD Modification [326 IAC 2-2] [40 CFR 52.21]

Any change or modification which may increase the VOC PTE of COE-5 and DC-2, CE-3 (listed in Section D.1) to greater than 249 tons per year, shall require prior approval from the Office of Air Quality before such change may occur.

D.5.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for COE-5 and any control devices.

Compliance Determination Requirements

D.5.7 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.5.3, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.5.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.5.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.9 Recuperative Thermal Oxidizer Operations

- (a) When operating the thermal oxidizer to achieve the limit established under 326 IAC 8-2-9, 3.5 pounds of VOC per gallon of coating less water, the thermal oxidizer shall maintain a minimum operating temperature of 1400° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a minimum overall VOC control efficiency of 92.2%. The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Conditions D.5.3 and D.5.4, when COE-5 is in operation.
- (b) Any change or modification which may increase the VOC actual emissions to 250 tons per year or more shall require prior approval from OAM before such change may occur.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.5.3 and D.5.4, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage limits and the VOC and HAPs emission limits established in Conditions D.5.3 and D.5.4.
 - (1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The daily volume weighted VOC content of the coatings as applied on days when a coating with a VOC content greater than 85.5 pounds of VOC per gallon of solids is used;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each month;
 - (6) The total HAPs usage for each month; and
 - (7) Monthly emissions in pounds of VOC and HAPs.
- (b) To document compliance with Condition D.5.3(b), records of the minimum operating temperature shall be maintained daily.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (k) One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:
- (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;
 - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and
 - (3) One (1) electric heater.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating excluding water, when using air dried or forced warm air dried coatings at temperatures up to ninety degrees Celsius (90EC), and extreme performance coatings designed for exposure to temperatures consistently above ninety-five degrees Celsius (95EC).
- (b) The thermal oxidizer shall be in operation at all times and maintain an overall VOC control efficiency of 92.2% for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility. Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating shall not exceed 85.5 pounds per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.6.2 New Source Toxics Control [326 IAC 2-4.1-1]

The use of the thermal oxidizer, CE-3, as described in Condition D.6.1(b), shall limit the potential to emit each individual HAP to less than ten (10) tons per year and the total HAPs to less than twenty-five (25) tons per year. Therefore, this facility is a minor source of HAPs, and the requirements of 326 IAC 2-4.1-1 are not applicable.

D.6.3 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from the one (1) chain on edge machine (COE-6) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control devices.

Compliance Determination Requirements

D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.6.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.6.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content limitation contained in Condition D.6.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.6.7 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition D.6.1. This volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U]$$

Where: A is the volume weighted average in pounds VOC per gallon

C is the VOC content of the coating in pounds VOC per gallon

and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

D.6.8 Recuperative Thermal Oxidizer

(a) The thermal oxidizer shall operate at all times that the process is in operation. When operating, the thermal incinerator shall maintain a minimum operating temperature of 1400EF during operation until a temperature and fan amperage has been determined from the most recent compliant stack test, as approved by IDEM. The temperature correlates to an overall VOC control efficiency of 92.2%. Once a temperature and duct pressure or fan amperage are determined during a compliance stack test, the operating temperature shall be greater than or equal to that temperature and the duct pressure or fan amperage shall be within a range established by the compliance stack test.

(b) When operating the thermal oxidizer to achieve compliance with 326 IAC 8-2-9, 3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water, the thermal oxidizer shall maintain a minimum overall control efficiency of 92.2%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2).

D.6.9 Particulate Matter (PM)

The dry filters for PM control shall be in operation and control emissions from the chain on edge machine (COE-6) at all times when the chain on edge machine is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.6.10 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack (C3) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.6.11 Parametric Monitoring

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the recuperative thermal oxidizer for measuring operating temperature. The output of this system shall be recorded, and that temperature shall be maintained at a minimum of 1400EF during operation until a temperature has been determined from the most recent compliance stack test, as approved by IDEM, OAQ. Once a temperature has been determined from the most recent compliance stack test, the temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test.
- (b) After the first compliance stack test, the duct pressure or fan amperage shall be observed at least once per week when the thermal oxidizer is in operation. This pressure or amperage shall be maintained within a range established in the most recent compliance stack test.
- (c) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the reading is outside the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.12 Record Keeping Requirements

- (a) To document compliance with Condition D.6.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.6.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

- (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month;
 - (5) The weight of VOCs emitted for each compliance period;
 - (6) The continuous temperature records for the thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test; and
 - (7) After the first compliance stack test, weekly records of the duct pressure or fan amperage.
- (b) To document compliance with Conditions D.6.3 and D.6.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	Ken-Koat, Inc.
Source Location:	1605 Riverfork Drive East, Huntington, Indiana 46750
County:	Huntington
SIC Code:	3479
Operation Permit No.:	T 069-7676-00018
Operation Permit Issuance Date:	July 9, 1999
Significant Source Modification No.:	SSM 069-12898-00018
Permit Reviewer:	CarrieAnn Ortolani

As of January 1, 2001, the name of the Office of Air Management (OAM) has been changed to the Office of Air Quality (OAQ).

The Office of Air Quality (OAQ) has reviewed a modification application from Ken-Koat, Inc. relating to the construction of the following emission units and pollution control devices (the thermal oxidizer is an existing, permitted control device):

- (a) One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:
 - (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;
 - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and
 - (3) One (1) electric heater.

The source is increasing the capacity at the one (1) dip conveyor designated as DC-2 as follows:

- (b) One (1) dip conveyor designated as DC-2, with emissions controlled by a thermal oxidizer, CE-3, with the following equipment:
 - (1) One (1) coating tank with a maximum topcoat application rate of ~~11.73~~ **12.00** pounds per hour, which exhausts to a stack designated as C3.
 - (2) One (1) primer tank with a maximum primer application rate of ~~5.32~~ **8.20** pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million British thermal units per hour, which exhausts to one (1) stack designated as C3.

The source never installed the one (1) dip and spin, identified as DS-2, and the one (1) dip conveyor, identified as DC-3, which will be removed from the permit.

History

On October 25, 2000, Ken-Koat, Inc. submitted an application to the OAQ requesting to add additional facilities to their existing plant, and to remove coating facilities that were never constructed from their Part 70 Operating Permit. Ken-Koat, Inc. was issued a Part 70 permit on July 9, 1999. An Administrative Amendment (069-11357-00018) was issued on December 13, 2000.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
C3	Thermal Oxidizer	24.0	1.00	30,000	1400

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 25, 2000. Additional information was received on December 26, 2000 and January 8, 2001, via telephone.

Emission Calculations

See pages 1 and 2 of 2 of Appendix A of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	6.81
PM ₁₀	6.81
SO ₂	0.00
VOC	160
CO	0.00
NO _x	0.00

HAPs	Potential To Emit (tons/year)
Xylenes	26.3
MIBK	25.6
MEK	17.8
Toluene	47.1
Formaldehyde	0.048
Ethyl benzene	6.16
Tetrachloroethylene	0.418
TOTAL	123

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4)(D), "Any modification with a potential to emit greater than or equal to twenty-five (25) tons per year of volatile organic compounds (VOC)," and 326 IAC 2-7-10.5(f)(6), "Any modification with a potential to emit greater than or equal to ten (10) tons per year of a single hazardous air pollutant as defined under Section 112(b) of the CAA or twenty-five (25) tons per year of any combination of hazardous air pollutants." Since the Title V Operating Permit has been issued, this approval is for construction only. The Administrative Amendment (AA 069-12991-00018) will give the source approval to operate the modification.

County Attainment Status

The source is located in Huntington County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment

Pollutant	Status
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Huntington County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	0.057
PM ₁₀	0.038
SO ₂	0.008
VOC	279
CO	0.250
NO _x	1.33

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more.
- (b) These emissions are based upon the OAQ emission data for 1998.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD applicability.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Pollutant	PM (tons/yr)	PM ₁₀ (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO _x (tons/yr)
Total Proposed Modification	0.340	0.340	0.00	12.5	0.00	0.00
Past Actual Emissions at Dip Conveyor DC-2	0.00	0.00	0.00	24.3	0.00	0.00
Net Emissions Increase	0.340	0.340	0.00	- 11.8	0.00	0.00
PSD Significant Level	25	15	40	40	100	40

- (a) This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.
- (b) The VOC emissions are less than 40 tons per year as a result of the requirements to operate the thermal oxidizer at a overall capture and control efficiency of no less than 92.2% (See page 1 of 2 of TSD Appendix A).
- (c) The past actual emissions at the dip conveyor, DC-2, are greater than the new potential to emit at DC-2 because the past actual emissions are calculated as the average actual emissions over the past two (2) years of operation. The actual emissions at DC-2 were not controlled by the thermal oxidizer until October 1999. Therefore, the actual emissions prior to October 1999 are without controls and are greater than the current or proposed potential to emit.
- (d) There are no contemporaneous increases or decreases from the facilities that were never constructed and are being removed from the permit because the past actual emissions and future potential emissions are zero (0).

The table below summarizes the potential to emit, reflecting all limits, of the emission units in Section D.1 of the Part 70 Operating Permit, after controls. This table evaluates the impact of the increase in capacity of the dip conveyor (DC-2) on the VOC limit in Section D.1.

Pollutant	PM (tons/yr)	PM ₁₀ (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO _x (tons/yr)
Total Emissions at Dip Conveyor DC-2 following modification	0.00	0.00	0.00	6.65	0.00	0.00
PTE of all facilities in Section D.1 of T 069-7676-00018	0.00	0.00	0.00	134	0.00	0.00
Maximum possible PTE of all facilities in Section D.1 including modification of Dip Conveyor DC-2	0.340	0.340	0.00	141	0.00	0.00
Limit in Section D.1	-	-	-	249	-	-

Changes in Section D.1 include the increase in capacity at Dip Conveyor (DC-2) and the removal of dip and spin (DS-2) and dip conveyor (DC-3), which were never operated, from the permit. The source will continue to comply with the limitation in Section D.1.

Federal Rule Applicability

- (a) This significant modification does not involve a pollutant-specific emissions unit with the potential to emit after control in an amount equal to or greater than 100 tons per year. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable.
- (b) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20, 40 CFR Part 61 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

- (a) The potential to emit each individual HAP from the dip conveyor, DC-2, is greater than 10 tons per year and the potential to emit any combination of HAPs from the dip conveyor, DC-2, is greater than 25 tons per year, before control by the thermal oxidizer. Pursuant to Condition D.1.2 of T 069-7676-00018, issued on July 9, 1999, the Maximum Achievable Control Technology (MACT) for the dip conveyor, DC-2, is the use of the thermal oxidizer, CE-3, which must maintain a minimum overall control efficiency of 92.2%, together with the application method of dip coating.
- (b) The potential to emit each individual HAP from the chain on edge machine, COE-6, is greater than 10 tons per year and the potential to emit any combination of HAPs from the chain on edge machine, COE-6, is greater than 25 tons per year, before control by the thermal oxidizer. After control by the thermal oxidizer, the potential to emit each individual HAP from the chain on edge machine, COE-6, is less than 10 tons per year and the potential to emit total HAPs is less than 25 tons per year. Therefore, since the thermal oxidizer must operate at an overall control efficiency of 92.2% to satisfy the MACT for other facilities and result in this facility's compliance with 326 IAC 8-2-9, the thermal oxidizer will have the same requirements for the one (1) chain on edge machine, COE-6, to make 326 IAC 2-4.1-1 not applicable. The thermal oxidizer, CE-3, must be in operation at all times when the chain on edge machine, COE-6, is in operation and must maintain a minimum overall control efficiency of 92.2%. Thus, the requirements of 326 IAC 2-4.1-1, New Source Toxics Control, are not applicable to this facility.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the one (1) chain on edge machine (COE-6) shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the one (1) chain on edge machine (COE-6) is in operation, in order to comply with this limit.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The potentials to emit VOC from the one (1) chain on edge machine (COE-6) and one (1) dip conveyor (DC-2) are each greater than 15 pounds per day, the facilities were constructed after July 1, 1990, and the Standard Industrial Classification Number is 3479. Therefore, the facilities can be subject to 326 IAC 8-2-9.

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts and products may cause, allow, or permit the discharge into the atmosphere of any VOC in excess of 3.5 pounds per gallon of coating excluding water, delivered to the coating applicator for air dried or forced warm air dried coatings at temperatures up to ninety degrees Celsius (90EC), and extreme performance coatings designed for exposure to temperatures consistently above ninety-five degrees Celsius (95EC).

- (a) Pursuant to T069-7676-00018, issued on July 9, 1999, the one (1) dip conveyor (DC-2) will comply with this rule by operating the thermal oxidizer, CE-3, at all times. The thermal oxidizer shall maintain a minimum overall control efficiency of 92.2%. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating shall not exceed 44.8 pounds per gallon of coating solids delivered to the applicators. Based on the MSDSs submitted by the source and calculations made, the dip conveyor (DC-2) will comply with this requirement.
- (b) The one (1) chain on edge machine (COE-6) will comply with this rule by operating the thermal oxidizer, CE-3, at all times when the chain on edge machine is in operation. The thermal oxidizer shall maintain a minimum overall control efficiency of 92.2%. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating shall not exceed 44.8 pounds per gallon of coating solids delivered to the applicators. Based on the MSDSs submitted by the source and calculations made, the chain on edge machine (COE-6) will comply with this requirement.
- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

- (a) The one (1) chain on edge machine (COE-6) has applicable compliance monitoring conditions as specified below:
 - (1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the chain on edge machine stack (C3) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
 - (2) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
 - (3) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
 - (4) A continuous monitoring system shall be calibrated, maintained, and operated on the recuperative thermal oxidizer for measuring operating temperature. The output of this system shall be recorded, and that temperature shall be maintained at a minimum of 1400EF during operation until a temperature has been determined from the most recent compliance stack test, as approved by IDEM, OAQ. Once a temperature has been determined from the most recent compliance stack test, the temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test.
 - (5) After the first compliance stack test, the duct pressure or fan amperage shall be observed at least once per week when the thermal oxidizer is in operation. This pressure or amperage shall be maintained within a range established in the most recent compliance stack test.
 - (6) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the reading is outside the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

These monitoring conditions are necessary because the dry filter must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70), and the thermal oxidizer must operate properly to ensure compliance with 326 IAC 8-2-9 (Miscellaneous Metal Coating) and 326 IAC 2-7 (Part 70), and to make 326 IAC 2-4.1-1 (New Source Toxics Control) and 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to this modification.

- (b) There is no change in the compliance monitoring requirements for the one (1) dip conveyor (DC-2).

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) dip and spin for metal inserts, designated as DS-1, with a maximum adhesive application rate of 5.68 pounds per hour, which exhausts to one (1) stack designated as S-18.
- ~~(b) One (1) dip and spin designated as DS-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:~~
 - ~~(1) One (1) coating tank with a maximum topcoat application rate of 17.97 pounds per hour, which exhausts to one (1) stack designated as C3.~~
 - ~~(2) One (1) primer tank with a maximum primer application rate of 4.10 pounds per hour, which exhausts to one (1) stack designated as C3.~~
 - ~~(3) One (1) electric heater, which exhausts to one (1) stack designated as C3.~~
- ~~(c)~~ **(b)** One (1) dip conveyor designated as DC-1, with a maximum application rate of 34.93 pounds per hour, which utilizes one (1) dryer, and is controlled by thermal oxidizer, CE-3, which exhausts to one (1) stack designated as C3.
- ~~(d)~~ **(c)** One (1) dip conveyor designated as DC-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
 - (1) One (1) coating tank with a maximum topcoat application rate of ~~11.73~~ **12.00** pounds per hour, which exhausts to a stack designated as C3.
 - (2) One (1) primer tank with a maximum primer application rate of ~~5.32~~ **8.20** pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.

- ~~(e)~~ One (1) dip conveyor designated as DC-3, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
 - ~~(1)~~ One (1) coating tank with a maximum topcoat application rate of 19.06 pounds per hour, which exhausts to one (1) stack designated as C3.
 - ~~(2)~~ One (1) primer tank with a maximum primer application rate of 4.29 pounds per hour, which exhausts to one (1) stack designated as C3.
 - ~~(3)~~ One (1) natural gas drying oven designated as OVEN-2, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.
- ~~(f)~~ (d) One (1) dip conveyor designated as DC-4, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
 - (1) One (1) coating tank with a maximum topcoat application rate of 17.60 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (2) One (1) primer tank with a maximum primer application rate of 3.96 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) natural gas drying oven, designated as OVEN-2, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.
- ~~(g)~~ (e) One (1) ransburg coating process, designated as RCP, controlled by the thermal oxidizer, CE-3, with a maximum metal insert rate of 1000 pounds per hour with the following equipment:
 - (1) Two (2) electrostatic paint booths, designated as EPB-1 and EPB-2 respectively, each with a maximum application rate of 11.42 pounds per hour, each exhausting to one (1) stack designated as S-15.
 - (2) One (1) natural gas fired oven, designated as OVEN-3, which exhausts to one (1) stack, designated as C4.
- ~~(h)~~ (f) Four (4) HVLP spray booths for painting metal inserts, designated as SB-1, SB-2, SB-3 and SB-4, with a maximum adhesive application rate of 5.94 pounds per hour, 11.91 pounds per hour, 4.92 pounds per hour and 4.38 pounds per hour, respectively. All are equipped with dry filters for particulate matter control. SB-1 exhausts to one (1) stack designated as S-10, SB-2 exhausts to one (1) stack designated as S-11, SB-3 exhausts to one (1) stack designated as S-1, and SB-4 exhausts to one (1) stack designated as S-2.
- ~~(i)~~ (g) One (1) open top degreaser, identified as DG, with a maximum trichloroethylene consumption rate of 12 gallons per day which exhausts internally.
- ~~(j)~~ (h) Three (3) steel grit blasters, designated as SGB-1, SGB-2, and SGB-3, each with a maximum metal insert throughput of 1200 pounds per hour, controlled by a baghouse designated as CE-1, exhausting to one (1) stack designated as #C1.
- ~~(k)~~ (i) One (1) aluminum oxide grit blaster, identified as ALOX-1, with a maximum metal insert throughput of 1200 pounds per hour, controlled by a baghouse designated as CE-2 and exhausting to a stack designated as #C2.

- (j) Four (4) HVLP chain on edge machines, designated as COE-1, COE-2, COE-3 and COE-4, with a maximum adhesive application rate of 9.38 pounds per hour, 2.2 pounds per hour, 21.51 pounds per hour and 16.08 pounds per hour, respectively. Each chain on edge machine is equipped with dry filters for particulate matter control. COE-1 exhausts to two (2) stacks designated as S-12 and S-13. COE-2 exhausts to one (1) stack designated as S-6. COE-3 exhausts to three (3) stacks designated as S-3, S-4 and S-5, and COE-4 exhausts to three (3) stacks S-22, S-23 and S-24, each utilizing the thermal oxidizer, CE-3, to control VOC emissions.
- ~~(m)~~ (k) One (1) HVLP chain on edge machine, designated as COE-5, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
- (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) electric heater which exhausts to one (1) stack designated as C3.
- (l) **One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:**
- (1) **Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;**
 - (2) **One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and**
 - (3) **One (1) electric heater.**

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) ~~One (1) dip and spin designated as DS-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:~~
- ~~(1) One (1) coating tank with a maximum topcoat application rate of 17.97 pounds per hour, which exhausts to one (1) stack designated as C3.~~
 - ~~(2) One (1) primer tank with a maximum primer application rate of 4.10 pounds per hour, which exhausts to one (1) stack designated as C3.~~
 - ~~(3) One (1) electric heater, which exhausts to one (1) stack designated as C3.~~
- (b) (c) One (1) dip conveyor designated as DC-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
- (1) One (1) coating tank with a maximum topcoat application rate of ~~44.73~~ **12.00** pounds per hour, which exhausts to a stack designated as C3.
 - (2) One (1) primer tank with a maximum primer application rate of ~~5.32~~ **8.20** pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.
- (c) ~~One (1) dip conveyor designated as DC-3, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:~~
- ~~(1) One (1) coating tank with a maximum topcoat application rate of 19.06 pounds per hour, which exhausts to one (1) stack designated as C3.~~
 - ~~(2) One (1) primer tank with a maximum primer application rate of 4.29 pounds per hour, which exhausts to one (1) stack designated as C3.~~
 - ~~(3) One (1) natural gas drying oven designated as OVEN-2, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.~~
- (d) One (1) dip conveyor designated as DC-4, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
- (1) One (1) coating tank with a maximum topcoat application rate of 17.60 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (2) One (1) primer tank with a maximum primer application rate of 3.96 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) natural gas drying oven, designated as OVEN-2, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.
- (e)(a)(3) One (1) natural gas fired thermal oxidizer designated as CE-3, with a maximum heat input capacity of 6.00 million Btu per hour, with a minimum oxidizing zone temperature of 1400F.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain an overall VOC control efficiency of 92.2%. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating per gallon of solids delivered to any of the facilities listed above in Section D.1 (DC-2, ~~DC-3~~, and DC-4, ~~and DS-2~~), the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) and COE-5 listed in Section D.5 shall be limited to ~~44.8~~ **67.8**. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

D.1.2 New Source Toxics Control [326 IAC 2-1-3.4]

The allowable HAP emissions shall be based on the Maximum Achievable Control Technology (MACT) analysis determined by the Office of Air **Quality Management**. The MACT for the facilities listed above in section D.1 (DC-2, ~~DC-3~~, and DC-4, ~~and DS-2~~), shall be the use of the thermal oxidizer, CE-3, as described in Condition D.1.1(b), in combination with the application method of dip coating. The overall efficiency of this control device shall be 92.2%.

D.1.3 PSD Modification [326 IAC 2-2] [40 CFR 52.21]

Any change or modification which may increase the VOC PTE of DC-2, ~~DC-3~~, DC-4, ~~DS-2~~, CE-3 and COE-5 (listed in Section D.5) to greater than 249 tons per year, shall require prior approval from the Office of Air **Quality Management** before such change may occur.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for DC-2, ~~DC-3~~, and DC-4, ~~and DS-2~~ and any control devices (CE-3).

D.1.7 Recuperative Thermal Oxidizer Operations

- (a) When operating the thermal oxidizer to achieve the limit established under 326 IAC 8-2-9, 3.5 pounds of VOC per gallon of coating less water, the thermal oxidizer shall maintain a minimum operating temperature of 1400° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a minimum overall VOC control efficiency of 92.2%. The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Conditions D.1.1 and D.1.2, when DC-2, ~~DC-3~~, and/or DC-4, ~~and DS-2~~ are in operation.
- (b) The owner or operator shall install, calibrate, operate and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with the limit in Condition D.1.2.
 - (1) This device shall have an accuracy of $\pm 2.0^{\circ}\text{C}$ or ± 0.75 percent of the temperature range measured in degrees Celsius, whichever is greater.
- (c) Any change or modification which may increase the VOC actual emissions to 250 tons per year or more shall require prior approval from ~~ΘAM~~ **OAQ** before such change may occur.

The following section has been added to the permit:

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (I) One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:
- (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;
 - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and
 - (3) One (1) electric heater.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating excluding water, when using air dried or forced warm air dried coatings at temperatures up to ninety degrees Celsius (90EC), and extreme performance coatings designed for exposure to temperatures consistently above ninety-five degrees Celsius (95EC).
- (b) The thermal oxidizer shall be in operation at all times and maintain an overall VOC control efficiency of 92.2%. Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating shall not exceed 44.8 pounds per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.6.2 New Source Toxics Control [326 IAC 2-4.1-1]

The use of the thermal oxidizer, CE-3, as described in Condition D.6.1(b), shall limit the potential to emit each individual HAP to less than ten (10) tons per year and the total HAPs to less than twenty-five (25) tons per year. Therefore, this facility is a minor source of HAPs, and the requirements of 326 IAC 2-4.1-1 are not applicable.

D.6.3 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from the one (1) chain on edge machine (COE-6) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control devices.

Compliance Determination Requirements

D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.6.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.6.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content limitation contained in Condition D.6.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.6.7 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition D.6.1. This volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U]$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

D.6.8 Recuperative Thermal Oxidizer

- (a) The thermal oxidizer shall operate at all times that the process is in operation. When operating, the thermal incinerator shall maintain a minimum operating temperature of 1400EF during operation until a temperature and fan amperage has been determined from the most recent compliant stack test, as approved by IDEM. The temperature correlates to an overall VOC control efficiency of 92.2%. Once a temperature and duct pressure or fan amperage are determined during a compliance stack test, the operating temperature shall be greater than or equal to that temperature and the duct pressure or fan amperage shall be within a range established by the compliance stack test.

- (b) When operating the thermal oxidizer to achieve compliance with 326 IAC 8-2-9, 3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water, the thermal oxidizer shall maintain a minimum overall control efficiency of 92.2%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2 (a)(2).

D.6.9 Particulate Matter (PM)

The dry filters for PM control shall be in operation and control emissions from the chain on edge machine (COE-6) at all times when the chain on edge machine is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.6.10 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack (C3) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.6.11 Parametric Monitoring

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the recuperative thermal oxidizer for measuring operating temperature. The output of this system shall be recorded, and that temperature shall be maintained at a minimum of 1400EF during operation until a temperature has been determined from the most recent compliance stack test, as approved by IDEM, OAQ. Once a temperature has been determined from the most recent compliance stack test, the temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test.
- (b) After the first compliance stack test, the duct pressure or fan amperage shall be observed at least once per week when the thermal oxidizer is in operation. This pressure or amperage shall be maintained within a range established in the most recent compliance stack test.
- (c) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the reading is outside the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.12 Record Keeping Requirements

- (a) To document compliance with Condition D.6.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.6.1.

 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month;
 - (5) The weight of VOCs emitted for each compliance period;
 - (6) The continuous temperature records for the thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test; and
 - (7) After the first compliance stack test, weekly records of the duct pressure or fan amperage.
- (b) To document compliance with Conditions D.6.3 and D.6.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 069-12898-00018.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Significant Source Modification to a Part 70 Operating Permit

Source Name:	Ken-Koat, Inc.
Source Location:	1605 Riverfork Drive East, Huntington, Indiana 46750
County:	Huntington
SIC Code:	3479
Operation Permit No.:	T 069-7676
Significant Source Modification No.:	SSM 069-12898-00018
Permit Reviewer:	CarrieAnn Ortolani

On February 15, 2001, the Office of Air Quality (OAQ) had a notice published in the Herald Press, Huntington, Indiana, stating that Ken-Koat, Inc. had applied for a Significant Source Modification to a Part 70 Operating Permit to construct additional metal coating facilities with a thermal oxidizer and dry filters as control at the existing source. The notice also stated that OAQ proposed to issue a Significant Source Modification and provided information on how the public could review the proposed Significant Source Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Source Modification to a Part 70 Operating Permit should be issued as proposed.

On March 7, 2001, David A. Hughes of SESCO Group, on behalf of Ken-Koat, Inc., submitted comments on the proposed Significant Source Modification to a Part 70 Operating Permit. The comments are as follows (The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded.**):

Comment 1:

In Conditions D.1.1(b) and D.6.1(b), it limits the VOC content of the coatings per gallon of solids delivered to 44.8. This seems to be a result of using the equation in 326 IAC 8-1-2(c), with the overall efficiency being 92.2% and the equivalent emission limit being 3.5 pounds per gallon of coating (from 326 IAC 8-2-9). However, the equivalent emission limit is to be in pounds of VOC per gallon of coating solids. This equivalent emission limit is determined using the equation in 326 IAC 8-1-2(b), which results in this limit being 6.67 pounds of VOC per gallon of coating solids. This in turn results in the actual limit for pounds of VOC per gallon of coating solids being 85.5. Therefore, this number should be substituted for the 44.8 in Conditions D.1.1(b), D.6.1(b), and anywhere else it may appear.

Response 1:

Pursuant to 326 IAC 8-1-2(b) and 326 IAC 8-1-2(c), the equivalent emission limit should, in fact, be in units of pounds of VOC per gallon of coating solids, as applied, and not pounds per gallon of coating. Pursuant to 326 IAC 8-1-2(b), VOC emissions shall be limited to no greater than the equivalent emissions, expressed as pounds of VOC per gallon of coating solids, which is computed using the following equation:

$E = L / (1 - L/D)$, where

- L = Applicable emission limit from this article in pounds of VOC per gallon of coating
- D = Density of VOC in coating in pounds per gallon of VOC (7.36)

E = Equivalent emission limit in pounds of VOC per gallon of coating solids, as applied

For this source:

$$E = 3.5 / (1 - 3.5/7.36) = 6.67$$

Thus, pursuant to 326 IAC 8-1-2(c) the actual VOC content of coatings shall not exceed the number computed in the following equation when the control efficiency of the thermal oxidizer is 92.2%:

$O = ((V - E)/V) \times 100$, where

- V = The actual VOC content of the coating, or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line, in units of pounds of VOC per gallon of coating solids
- E = Equivalent emission limit in pounds of VOC per gallon of coating solids, as applied
- O = Equivalent overall control efficiency of the capture system and control device as a percentage

This equation can be rearranged as follows:

$$100E/(100 - O) = V = 85.5$$

Since the emission limit in Conditions D.1.1(b) and D.6.1(b) is in terms of pounds of VOC per gallon of coating solids, as applied, these conditions are revised as follows:

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain an overall VOC control efficiency of 92.2%. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating **in pounds** per gallon of solids delivered to any of the facilities listed above in Section D.1 (DC-2 and DC-4), the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) and COE-5 listed in Section D.5 shall be limited to **85.5 44.8**. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating excluding water, when using air dried or forced warm air dried coatings at temperatures up to ninety degrees Celsius (90EC), and extreme performance coatings designed for exposure to temperatures consistently above ninety-five degrees Celsius (95EC).

- (b) The thermal oxidizer shall be in operation at all times and maintain an overall VOC control efficiency of 92.2%. Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating shall not exceed **85.5** ~~44.8~~ pounds per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Comment 2:

Conditions D.6.8(a), D.6.11(a) and D.6.12(a)(7) all include requirements concerning monitoring and recording the duct pressure or fan amperage of the Recuperative Thermal Oxidizer. This system has dampers on a variable speed fan which changes depending on which processes are and are not in operation. Therefore, pressure and amperage readings will not be consistent and do not serve as a reliable surrogate parameter for the operation of the system. These requirements for pressure or amperage recording should be removed, with the oxidizer temperature remaining as the method of monitoring oxidizer operation.

Response 2:

Due to the multitude of facilities exhausting to the same thermal oxidizer, a large range of fan amperages and duct pressures will occur while the thermal oxidizer is operating properly. The requirement for monitoring duct pressure or fan amperage will not be removed from the permit because it is necessary to ensure that the thermal oxidizer is capturing emissions. A pressure gauge on the system or stack should be able to demonstrate negative pressure or a range of fan amperages should be determined to show that the thermal oxidizer is operating properly. Therefore, there are no changes to the permit as a result of this comment.

Comment 3:

Condition D.2.11(a)(3) of the existing permit requires that records be kept of the daily volume weighted VOC content of the coatings as applied. Condition D.5.10(a)(3) only requires monthly records of the volume weighted VOC content. It is requested that Condition D.2.11(a)(3) be modified to require monthly rather than daily recording of the volume weighted VOC content.

Response 3:

The limit in 326 IAC 8-2-9 is a limit of the daily volume weighted average VOC content of the coatings used. Therefore, a monthly volume weighted average does not yield the necessary information to determine compliance with this rule. However, the daily volume weighted VOC content of coatings used only has to be recorded on days when the a coating with a VOC content greater than the limited VOC content mentioned in Conditions D.2.1 and D.5.3 are used. This content is 85.5 pound of VOC per gallon of solids. Sections D.2 and D.5 were not included in this review. At other times, the Material Safety Data Sheets (MSDSs) will be sufficient to show compliance with the VOC content limitations. Therefore, Conditions D.2.11(a)(3) and D.5.10(a)(3) have been revised as follows:

- (3) The daily volume weighted VOC content of the coatings as applied **on days when a coating with a VOC content greater than 85.5 pounds of VOC per gallon of solids is used;**

And

- (3) The ~~monthly~~ **daily** volume weighted VOC content of the coatings as applied **on days when a coating with a VOC content greater than 85.5 pounds of VOC per gallon of solids is used;**

Comment 4:

Dip Conveyor DC-4, listed on the existing permit, has not been and will not be installed, so it should be removed from the permit.

Response 4:

Section A.2, the facility description box in Section D.1 and Conditions D.1.1, D.1.2, D.1.3, D.1.4 and D.1.7 are revised as follows, including the changes to delete COE-2 from Comment 5 by Linda M. Snyder:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]
This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) dip and spin for metal inserts, designated as DS-1, with a maximum adhesive application rate of 5.68 pounds per hour, which exhausts to one (1) stack designated as S-18.
- (b) One (1) dip conveyor designated as DC-1, with a maximum application rate of 34.93 pounds per hour, which utilizes one (1) dryer, and is controlled by thermal oxidizer, CE-3, which exhausts to one (1) stack designated as C3.
- (c) One (1) dip conveyor designated as DC-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
 - (1) One (1) coating tank with a maximum topcoat application rate of 12.00 pounds per hour, which exhausts to a stack designated as C3.
 - (2) One (1) primer tank with a maximum primer application rate of 8.20 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.
- ~~(d) One (1) dip conveyor designated as DC-4, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:~~
 - ~~(1) One (1) coating tank with a maximum topcoat application rate of 17.60 pounds per hour, which exhausts to one (1) stack designated as C3.~~
 - ~~(2) One (1) primer tank with a maximum primer application rate of 3.96 pounds per hour, which exhausts to one (1) stack designated as C3.~~
 - ~~(3) One (1) natural gas drying oven, designated as OVEN-2, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.~~

- ~~(e)~~(d) One (1) ransburg coating process, designated as RCP, controlled by the thermal oxidizer, CE-3, with a maximum metal insert rate of 1000 pounds per hour with the following equipment:
- (1) Two (2) electrostatic paint booths, designated as EPB-1 and EPB-2 respectively, each with a maximum application rate of 11.42 pounds per hour, each exhausting to one (1) stack designated as S-15.
 - (2) One (1) natural gas fired oven, designated as OVEN-3, which exhausts to one (1) stack, designated as C4.
- ~~(f)~~(e) Four (4) HVLP spray booths for painting metal inserts, designated as SB-1, SB-2, SB-3 and SB-4, with a maximum adhesive application rate of 5.94 pounds per hour, 11.91 pounds per hour, 4.92 pounds per hour and 4.38 pounds per hour, respectively. All are equipped with dry filters for particulate matter control. SB-1 exhausts to one (1) stack designated as S-10, SB-2 exhausts to one (1) stack designated as S-11, SB-3 exhausts to one (1) stack designated as S-1, and SB-4 exhausts to one (1) stack designated as S-2.
- ~~(g)~~(f) One (1) open top degreaser, identified as DG, with a maximum trichloroethylene consumption rate of 12 gallons per day which exhausts internally.
- ~~(h)~~(g) Three (3) steel grit blasters, designated as SGB-1, SGB-2, and SGB-3, each with a maximum metal insert throughput of 1200 pounds per hour, controlled by a baghouse designated as CE-1, exhausting to one (1) stack designated as #C1.
- ~~(i)~~(h) One (1) aluminum oxide grit blaster, identified as ALOX-1, with a maximum metal insert throughput of 1200 pounds per hour, controlled by a baghouse designated as CE-2 and exhausting to a stack designated as #C2.
- ~~(j)~~(i) ~~Four (4)~~ **Three (3)** HVLP chain on edge machines, designated as COE-1, ~~COE-2~~, COE-3 and COE-4, with a maximum adhesive application rate of 9.38 pounds per hour, ~~2.2 pounds per hour~~, 21.51 pounds per hour and 16.08 pounds per hour, respectively. Each chain on edge machine is equipped with dry filters for particulate matter control. COE-1 exhausts to two (2) stacks designated as S-12 and S-13. ~~COE-2 exhausts to one (1) stack designated as S-6.~~ COE-3 **and exhausts to three (3) stacks designated as S-3, S-4 and S-5, and COE-4 exhausts to three (3) stacks S-22, S-23 and S-24, each utilizing the thermal oxidizer, CE-3, to control VOC emissions, and stack C3.**
- ~~(k)~~(j) One (1) HVLP chain on edge machine, designated as COE-5, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
- (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) electric heater which exhausts to one (1) stack designated as C3.
- ~~(l)~~(k) One (1) chain on edge machine, identified as COE-6, equipped with high volume, low pressure (HVLP) spray applicators, with emissions controlled by a thermal oxidizer, identified as CE-3, and dry filters, exhausting to stack C3 and consisting of the following equipment:

- (1) Two (2) coating booths with a maximum topcoat application rate of 18.70 pounds per hour;
- (2) One (1) primer booth with a maximum primer application rate of 4.27 pounds per hour; and
- (3) One (1) electric heater.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (c) One (1) dip conveyor designated as DC-2, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:
 - (1) One (1) coating tank with a maximum topcoat application rate of 12.00 pounds per hour, which exhausts to a stack designated as C3.
 - (2) One (1) primer tank with a maximum primer application rate of 8.20 pounds per hour, which exhausts to one (1) stack designated as C3.
 - (3) One (1) natural gas drying oven designated as OVEN-1, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.
- ~~(d) One (1) dip conveyor designated as DC-4, with emissions controlled by thermal oxidizer, CE-3, with the following equipment:~~
 - ~~(1) One (1) coating tank with a maximum topcoat application rate of 17.60 pounds per hour, which exhausts to one (1) stack designated as C3.~~
 - ~~(2) One (1) primer tank with a maximum primer application rate of 3.96 pounds per hour, which exhausts to one (1) stack designated as C3.~~
 - ~~(3) One (1) natural gas drying oven, designated as OVEN-2, with a maximum heat input rate of 0.70 million Btu per hour, which exhausts to one (1) stack designated as C3.~~
- (a)(3) One (1) natural gas fired thermal oxidizer designated as CE-3, with a maximum heat input capacity of 6.00 million Btu per hour, with a minimum oxidizing zone temperature of 1400F.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain an overall VOC control efficiency of 92.2%. This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating **in pounds** per gallon of solids delivered to ~~any of the facilities listed above in Section D.1 (DC-2 and DC-4)~~, the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) and COE-5 listed in Section D.5 shall be limited to **85.5 44.8**. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

D.1.2 New Source Toxics Control [326 IAC 2-1-3.4]

The allowable HAP emissions shall be based on the Maximum Achievable Control Technology (MACT) analysis determined by the Office of Air Quality. The MACT for ~~the facilities listed above in section D.1 (DC-2 and DC-4)~~, shall be the use of the thermal oxidizer, CE-3, as described in

Condition D.1.1(b), in combination with the application method of dip coating. The overall efficiency of this control device shall be 92.2%.

D.1.3 PSD Modification [326 IAC 2-2] [40 CFR 52.21]

Any change or modification which may increase the VOC PTE of DC-2, ~~DC-4~~, CE-3 and COE-5 (listed in Section D.5) to greater than 249 tons per year, shall require prior approval from the Office of Air Quality before such change may occur.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for DC-2 ~~and DC-4~~ and any control devices (CE-3).

D.1.7 Recuperative Thermal Oxidizer Operations

- (a) When operating the thermal oxidizer to achieve the limit established under 326 IAC 8-2-9, 3.5 pounds of VOC per gallon of coating less water, the thermal oxidizer shall maintain a minimum operating temperature of 1400° F, or a minimum operating temperature as determined by the most recent compliance test, to maintain a minimum overall VOC control efficiency of 92.2%. ~~The recuperative thermal oxidizer shall operate at all times, to demonstrate compliance with Conditions D.1.1 and D.1.2, when DC-2 and/or DC-4 are in operation.~~
- (b) The owner or operator shall install, calibrate, operate and maintain a device that continuously records the combustion temperature of any effluent gases incinerated to achieve compliance with the limit in Condition D.1.2.
 - (1) This device shall have an accuracy of $\pm 2.0^{\circ}\text{C}$ or ± 0.75 percent of the temperature range measured in degrees Celsius, whichever is greater.
- (c) Any change or modification which may increase the VOC actual emissions to 250 tons per year or more shall require prior approval from OAQ before such change may occur.

On March 15, 2001, Linda Snyder of Ken-Koat, Inc., submitted comments on the proposed Significant Source Modification to a Part 70 Operating Permit. The comments are as follows (The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**):

Comment 5:

Please delete COE-2 coating machine from our Title V permit. The machine was dismantled and removed from our facility.

Response 5:

Section A.2 (i) and (i) of the facility description box in Section D.2 are revised in response to this comment and to correct stack identifications that are no longer correct. Conditions D.2.3, D.2.8, and D.2.10 are also revised as follows:

- (e) ~~Four (4)~~ **Three (3)** HVLP chain on edge machines, designated as COE-1, ~~COE-2~~, COE-3 and COE-4, with a maximum adhesive application rate of 9.38 pounds per hour, ~~2.2 pounds per hour~~, 21.51 pounds per hour and 16.08 pounds per hour, respectively. Each chain on edge machine is equipped with dry filters for particulate matter control. COE-1 exhausts to two (2) stacks designated as S-12 and S-13. ~~COE-2 exhausts to one (1) stack designated as S-6.~~ COE-3 ~~and exhausts to three (3) stacks designated as S-3, S-4 and S-5,~~ and COE-4 exhausts to ~~three (3) stacks S-22, S-23 and S-24,~~ each utilizing the thermal oxidizer, CE-3, to control VOC emissions, ~~and stack C3.~~

D.2.2 PSD Modification [326 IAC 2-2] [40 CFR 52.21]

The VOC input of the above listed facilities in Section D.2 (DC-1, DS-1, RCP, SB-1 - SB-4 and **COE-1, COE-3 and COE-4** ~~COE-1--COE-4~~), and Section D.4 (DG) shall be limited to less than 250 tons per twelve (12) consecutive month period. This production limitation is equivalent to a VOC potential to emit of less than 250 tons per twelve (12) consecutive month period, therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

D.2.3 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the four (4) HVLP spray booths, the ~~four (4)~~ **three (3)** chain on edge machines and the ransburg coating process shall not exceed allowable PM emission rate based on the following equation:

Interpolation ~~and extrapolation~~ of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.8 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the four (4) HVLP spray booths (SB-1 - SB-4), the ~~four (4)~~ **three (3)** chain on edge machines (COE-1, **COE-3 and COE-4**) and the ransburg coating process (RCP) are in operation.

D.2.10 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (S-1, S-2, ~~S-3, S-4, S-5~~, S-6, S-10, S-11, S-12, S-13, ~~S-14~~, **and C3** ~~S-22, S-23, and S-24~~) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Upon further review, the OAQ has decided to make the following changes to the Significant Source Modification to a Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

Change 1:

Section A.2 (d) and (d) of the facility description box in Section D.2 are revised as follows:

- (d) One (1) ransburg coating process, designated as RCP, controlled by the thermal oxidizer,

CE-3, with a maximum metal insert rate of 1000 pounds per hour with the following equipment:

- (1) Two (2) electrostatic paint booths, designated as EPB-1 and EPB-2 respectively, each with a maximum application rate of 11.42 pounds per hour, each exhausting to ~~one (1) stack designated as S-15~~ **the thermal oxidizer (CE-3) and stack C3.**
- (2) One (1) natural gas fired oven, designated as OVEN-3, which exhausts to one (1) stack, designated as C4.

Change 2:

Sections D.1.1, D.2.1, D.5.3 and D.6.1 have been revised to clarify that an overall control efficiency of 92.2% is required for each facility. Once total enclosure of each facility is achieved an overall control efficiency of 92.2% for all or any combination of facilities will ensure a control efficiency of 92.2% for each facility. These conditions were also changed to be consistent with other modifications made to the permit.

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain an overall VOC control efficiency of 92.2% **for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility.** This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating in pounds per gallon of solids delivered to ~~any of the facilities listed above in Section D.1 (DC-2 and DC-4),~~ the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) and COE-5 listed in Section D.5 shall be limited to **85.5 44.8**. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.
- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain a minimum overall VOC control efficiency of 92.2% **for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility.** This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2).

Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating **in pounds** per gallon of solids delivered to any of the facilities listed above in Section D.2 (DC-1, RCP, COE-3 and COE-4) and the facilities listed in Section D.1 (DC-

2, ~~DC-3, DC-4, and DS-2~~) and COE-5 listed in Section D.5 shall be limited to ~~85.5~~ **67.8**. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (d) The input of VOC to DC-1, RCP, COE-3, and COE-4 and the usage of cleanup solvent for DC-1, RCP, COE-3, and COE-4 (the usage of cleanup solvent may need to take into account any recycling of cleanup rags or reused solvent) shall be limited to 2564 tons used per twelve (12) consecutive months period. This limitation will prevent the VOC emissions from DC-1, RCP, COE-3, and COE-4 from being greater than 200 tons per twelve (12) consecutive month period. This limitation is based upon the use of a control device with an overall control efficiency of 92.2%.
- (e) The input of VOC including cleanup solvent, minus the VOC solvent shipped out delivered to the applicators of SB-1, SB-2, SB-3 and SB-4 shall each be limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-2-9 will not apply.
- (f) The input VOC of COE-1, ~~COE-2~~ and DS-1 shall each be limited to less than 25 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-2-9 will not apply.

D.5.3 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating less water.

- (b) When operating the thermal oxidizer, CE-3, to achieve the limit established under 326 IAC 8-2-9 (3.5 pounds of VOC emitted to the atmosphere per gallon of coating less water) the thermal oxidizer shall maintain a minimum overall VOC control efficiency of 92.2% **for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility.** This efficiency and the use of the thermal oxidizer are required by 326 IAC 8-1-2 (a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating **in pounds** per gallon of solids delivered to the facilities listed above in Section D.5 (COE-5), the following facilities listed in Section D.1 (DC-2, ~~DC-3, DC-4, and DS-2~~), and the following facilities listed in Section D.2 (RCP, COE-3 and COE-4) shall be limited to **85.5** ~~67-8~~. This overall efficiency of 92.2% shall be maintained in order to demonstrate compliance with 326 IAC 8-2-9 and 326 IAC 8-1-2(a)(2).

D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 3.5 pounds of VOC per gallon of coating excluding water, when using air dried or forced warm air dried coatings at temperatures up to ninety degrees Celsius (90EC), and extreme performance coatings designed for exposure to temperatures consistently above ninety-five degrees Celsius (95EC).
- (b) The thermal oxidizer shall be in operation at all times and maintain an overall VOC control efficiency of 92.2% **for each facility. If total enclosure of all facilities is achieved, an overall VOC control efficiency of 92.2% for the total of all facilities will ensure an overall VOC control efficiency of 92.2% for each facility.** Based upon 326 IAC 8-1-2(c) and the overall control efficiency of 92.2%, the VOC content of the coating shall not exceed **85.5** ~~44-8~~ pounds per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Change 3:

For consistency the performance testing conditions in Section D.1, D.2 and D.5 have been revised to agree with the performance testing condition in Section D.6. The revisions are as follows:

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) ~~Testing of this facility is specifically required by this permit and pursuant to CP No. 069-9246-00018, issued on September 25, 1998. Compliance with the control efficiency and minimum operating temperature specified in Condition D.1.1(b) shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~
- (b) ~~Pursuant to CP No. 069-9246-00018, issued on September 25, 1998, during the period within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, a performance test shall be required to demonstrate that the source is complying with 326 IAC 8-2-9.~~
- (1) ~~If the oxidizer is determined to demonstrate compliance, the required temperature and control efficiency shall be specified.~~
- (2) ~~If the oxidizer is determined to not demonstrate compliance, the efficiency needed to comply with 326 IAC 8-2-9 shall be determined by the performance test.~~

~~(3) The source shall be required to comply with the required control efficiency as determined by the performance test.~~

~~(c) This test shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.~~

During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

~~During the period within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, a performance test shall be required to demonstrate that the source is complying with 326 IAC 8-2-9. This test shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.~~ **During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.**

D.5.7 Testing Requirements [326 IAC 2-7-6(1),(6)]

~~(a) Testing of this facility is specifically required by this permit and pursuant to CP No. 069-9246-00018, issued on September 25, 1998. Compliance with the control efficiency and minimum operating temperature specified in Condition D.5.3(b) shall be determined by a performance test conducted in accordance with Section C- Performance Testing.~~

~~(b) Pursuant to CP No. 069-9246-00018, issued on September 25, 1998, during the period within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, a performance test shall be required to demonstrate that the source is complying with 326 IAC 8-2-9.~~

~~(1) If the oxidizer is determined to demonstrate compliance, the required temperature and control efficiency shall be specified.~~

~~(2) If the oxidizer is determined to not demonstrate compliance, the efficiency needed to comply with 326 IAC 8-2-9 shall be determined by the performance test.~~

~~(3) The source shall be required to comply with the required control efficiency as determined by the performance test.~~

~~(c) This test shall be repeated at least once every two and one-half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.~~

During the period between 30 and 36 months after issuance of SSM 069-12898-00018, in order to demonstrate compliance with Condition D.5.3, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

Change 4:

The following additional change has been made as a result of the above mentioned changes:

D.5.5 PSD Modification [326 IAC 2-2] [40 CFR 52.21]

Any change or modification which may increase the VOC PTE of COE-5 and DC-2, ~~DC-3, DC-4,~~
~~DS-2,~~ CE-3 (listed in Section D.1) to greater than 249 tons per year, shall require prior approval from
the Office of Air Quality before such change may occur.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Page 1 of 2 TSD App A

Company Name: Ken-Koat, Inc.
Address City IN Zip: 1605 Riverfork Drive East, Huntington, Indiana 46750
SSM: 069-12898
Pit ID: 069-00018
Reviewer: CarrieAnn Ortolani
Date: October 25, 2000

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Chain on Edge COE-6																
Primer + MEK	7.38	84.58%	0.0%	84.6%	0.0%	8.28%	0.00058	1000.000	6.24	6.24	3.62	86.89	15.86	1.16	75.39	60%
Topcoat + Toluene	7.89	82.96%	0.0%	83.0%	0.0%	10.10%	0.00240	1000.000	6.55	6.55	15.71	377.02	68.81	5.65	64.81	60%
Dip Conveyor DC-2																
Primer + MEK	7.49	82.09%	0.0%	82.1%	0.0%	0.00%	0.00027	4000.000	6.15	6.15	6.64	159.37	29.09	0.00	n/a	100%
Topcoat + Naphtha	6.27	88.07%	0.0%	88.1%	0.0%	0.00%	0.00048	4000.000	5.52	5.52	10.60	254.45	46.44	0.00	n/a	100%

PM Control Efficiency 95.00%
VOC Control Efficiency 92.20%

State Potential Emissions

Add worst case coating to all solvents

Uncontrolled **36.6** **878** **160** **6.81**
Controlled **2.85** **68.5** **12.5** **0.340**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Ken-Koat, Inc.
Address City IN Zip: 1605 Riverfork Drive East, Huntington, Indiana 46750
SSM: 069-12898
Pit ID: 069-00018
Reviewer: CarrieAnn Ortolani
Date: October 25, 2000

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % MIBK	Weight % MEK	Weight % Toluene	Weight % Formaldehyde	Weight % Ethylbenzene	Weight % Tetrachloroethylene		Xylene Emissions (tons/yr)	MIBK Emissions (tons/yr)	MEK Emissions (tons/yr)	Toluene Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	Ethylbenzene Emissions (tons/yr)	Tetrachloroethylene Emissions (tons/yr)
Chain on Edge COE-6																		
Primer (205A + MEK)	7.38	0.00058	1000.000	0.00%	42.76%	39.19%	0.13%	0.08%	0.00%	0.00%		0.00	8.02	7.35	0.02	0.02	0.00	0.00
Topcoat (EP6788 + Toluene)	7.89	0.00240	1000.000	31.66%	0.00%	0.00%	47.14%	0.00%	7.43%	0.50%		26.26	0.00	0.00	39.10	0.00	6.16	0.42
Dip Conveyor DC-2																		
Primer (205A + MEK)	7.49	0.00027	4000.000	0.00%	49.66%	29.38%	0.15%	0.09%	0.00%	0.00%		0.00	17.59	10.41	0.05	0.03	0.00	0.00
Topcoat (Nylobond + Naphtha)	6.27	0.00048	4000.000	0.00%	0.00%	0.00%	15.00%	0.00%	0.00%	0.00%		0.00	0.00	0.00	7.91	0.00	0.00	0.00

Individual Total:	26.3	25.6	17.8	47.1	0.048	6.16	0.418
Overall Total:	123						
(COE-6 and DC-2 only) Control Efficiency:	92.20%						
Individual Total after Control:	2.05	2.00	1.39	3.67	0.004	0.480	0.033
Overall Total after Control:	9.62						

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs